REMARKS

The Examiner is thanked for the careful examination of the application. However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the rejections.

Independent claims 1, 13, 15, and 16 have been amended to include the subject matter of dependent claims 28 – 31, respectively, and method claims 20 – 27 have been cancelled. Accordingly, the foregoing amendments should be entered after final rejection. Applicant reserves the right to file one or more divisional applications to the cancelled subject matter. Also, independent claims 1, 13, 15 and 16 now recite that the boards are precoated boards, i.e. the boards receive the coating while on-line.

35 USC 112:

Support for claims 28 – 31 can be found at least in paragraphs [0040] and [0041] of the published application. The references to "overall surface" would clearly indicate to one of ordinary skill in the art, that the invention could be used on the entire facing sheet. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

Double Patenting:

Three provisional double patenting rejections have been made. However, in view of the fact that the rejections are provisional and that the claims of any of the applications may later be changed, Applicant respectfully requests that the rejections be held in abeyance. Applicant reserves the right to challenge any of the rejections at a later time if necessary.

Art Rejections:

Claims 1 – 7, 9, and 12 – 19 have been rejected under 35 USC 103(a) as allegedly being unpatentable over USP 4,287,103, hereinafter *Francis.*

The relevant claims 1 – 19 recite various structures that have certain structural qualities or details. For example, claim 1 recites that the coating

penetrates into the gypsum core, and claims 13 – 15 recite that the boards have a particular finish. It is noted that the claim features result not only from certain elements used in the construction, but also from the methods disclosed in the specification by which the claimed boards are constructed. Accordingly, although claims 1 – 19 are product claims, the products result from a combination of the materials used and the methods by which they are assembled. For example, one method of enabling the coating to penetrate into the gypsum core is to apply the coating when the board is wet. As another example, *Francis* teaches a specific viscosity of the joint compound (350 to about 750 Brabender units at 70F, column 6, lines 55 - 65), which is undoubtedly good for applying a joint compound, but is more than likely too thick to be used as a skim coat intended to precoat the board on-line, let alone to penetrate into the surface of the facing. Thus, in the arguments set forth below, in some cases the method of construction is relevant, even though the claims define the resulting product.

The Examiner relies upon *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980) so as to shift the burden of proving differences between the prior art and the claimed invention to the Applicant. However, *In re Fitzgerald* is different than the present case. In *In re Fitzgerald*, there were minimal differences between the elements and production methods. See footnote 1, which states "Both fasteners possess the same utility, employ the same crystallizable polymer (nylon 11), and have an adherent plastic patch formed by melting and then cooling the polymer." In the present case, differences between the claimed features and the applied prior art can be determined from the information provided in both *Francis* and the specification of the present application. Clearly, a diluted form of joint compound applied to a wet board is going to result in a different structure and appearance than regular joint compound applied to a dry board. Clearly also a precoated board, i.e. a board which is coated on-line thus when horizontal, will show uniformity in terms of coating thickness that cannot be achieved when a compound is trowelled on an already erected wall.

For example, better adhesion of the facing sheet to the gypsum board and increased board strength, as measured by nail pull, result from the methods taught in the present application. See, in particular, paragraphs [0065] to [0067] of the present application. The coating improves nail pull values by up to 25%. This allows for the

use of facing sheets of lower weight or quality, with attendant cost reductions. These improved properties may not be attained by coating the boards in an already erected wall and in fact by only filling the shallow valley formed by the edges (as it is the case in *Francis* et al.). These improved properties may only be attained by coating one side of the boards during the manufacturing process, which is reflected in the wording of present product claim 1 (which is about a precoated board).

Claims 1, 13, 15, and 16 have been amended to recite that the boards are precoated with the coating, i.e., the coating is applied while the board is still in the manufacturing process. That amendment is intended to respond to the Examiner's argument that the remarks are not commensurate with the scope of the claims. As a result of the precoating process, now recited in the claims, the entire surface is coated and a portion of the coating penetrates into the gypsum core. As is explained in the present specification, the depth of penetration of the coating is influenced by the relative moisture level and/or degree of set. And, if the moisture content is low, the coating may only penetrate into the paper facing sheet, i.e., and not into the core. See paragraph [0047] of the published application. Although the present invention is not limited to the preferred disclosed embodiments, one way of having the coating penetrate into the paper is to have the coating applied on a relatively wet board.

In contrast to the present application, *Francis* teaches only providing the joint compound in the valleys at the edge of the boards. *Francis* does not teach putting the coating over the entirety of the facing sheet. In addition, *Francis* neither mentions nor suggests that the coating penetrates into the core. Furthermore, *Francis* teaches applying the coating to an assembled board that is presumably well set and dry. See column 2, lines 30 – 31. Accordingly, whether or not the same materials are used, as alleged by the Examiner, *Francis* does not teach that the coating penetrates into the core. In fact, according to paragraph [0047] of the present application, it is likely that the coating of *Francis* does not penetrate into the core. Accordingly, contrary to the assertions of the Examiner, there is no teaching or suggestion of the *Francis* coating penetrating into the core.

Accordingly, claims 1 – 7, 9 and 12 are clearly patentable over *Francis*.

Claim 13 also recites a coating disposed on at least a portion of the facing sheet such that the facing sheet has a level 5 finish. A level 5 finish is defined in the

specification. The specification furthermore teaches a certain combinations of materials that form the coating, various ways of applying the coating, such as on a wet board, and forming a skim coat with the coating. None of those features are taught or even suggested by *Francis*. Accordingly, it is not sufficient to say that *Francis* may use the same materials. Even if the materials were the same, *Francis* does not teach the way of applying them that is taught in the present specification in order to arrive at the claimed product that includes a level 5 finish; especially that the boards of the invention are precoated boards which allows the achievement of a level 5 finish. However, the present invention is not limited to the specific embodiments disclosed in the specification.

Accordingly, in view of the differences between the methods taught by *Francis* and the resulting boards of claims 13 – 14, Applicant submits that claims 13 – 14 are patentable.

Claim 15 also recites a coating disposed on at least a portion of the facing sheet such that the facing sheet has a level 4 finish. A level 4 finish is defined in the specification. The specification furthermore teaches a certain combinations of materials that form the coating, various ways of applying the coating, such as on a wet board, and forming a skim coat with the coating. None of those features are taught or even suggested by *Francis*. Accordingly, it is not sufficient to say that *Francis* may use the same materials. Even if the materials were the same, *Francis* does not teach the way of applying them that is taught in the present specification in order to arrive at the claimed product that includes a level 4 finish; especially that the boards of the invention are precoated boards which allows the achievement of a level 4 finish. However, the present invention is not limited to the specific embodiments disclosed in the specification.

Accordingly, in view of the differences between the methods taught by *Francis* and the resulting boards of claim 15, Applicant submits that claim 15 is patentable.

Claim 16 also recites that a kit includes a quantity of joint compound and a plurality of gypsum boards having a coating thereon, and that the coating is a diluted form of the joint compound. In contrast to claim 16, *Francis* does not teach that there is both a coating on the board, as well as the joint compound. Accordingly, claim 16, and dependent claims 17 - 19 are patentable over *Francis*.

Claims 8, 10, and 11 have been rejected under 35 USC 103(a) as being unpatentable over *Francis* in view of USP 6,105,325, hereinafter *Zuber*. However, the portions of *Zuber* relied upon by the Examiner do not overcome the deficiencies of *Francis*.

In view of the foregoing arguments, the Examiner is respectfully requested to reconsider and withdraw the rejections.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 26, 2007 By: /WCRowland/
William C. Rowland
Registration No. 30888

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620